REMARKS

In the Office Action, the Examiner maintained the restriction requirement, commented on the listing of references in the specification, rejected claims 1-5 and 9-12 under 35 U.S.C. §112, first paragraph as failing to meet the written description requirement, rejected claims 1 and 12 under 35 U.S.C. §112, first paragraph as failing to meet the enablement requirement, rejected claims 1-3, 5, and 9 under 35 U.S.C. §102(a) as being anticipated by Vidrio et al. (The Journal of Pharmacology and Experimental Therapeutics, 307:497-504, 2003), rejected claims 1-5 and 9-11 under 35 U.S.C. §102(a) as being anticipated by Nipro Corporation (EP 1459763 A1), and rejected claims 1-5 and 9-12 under 35 U.S.C. §103(a) over Goldstein et al. (US 7129035) in view of Seamonds et al. (The Journal of Biological Chemistry, 246:5391-5397, 1971). Each raised by the Examiner is addressed separately below. In view of the claim amendments noted above and the remarks below, applicants respectfully request reconsideration of the merits of this patent application.

No extension of time is believed to be necessary and no fee is believed to be due in connection with this response. However, if any extension of time is required in this or any subsequent response, please consider this to be a petition for the appropriate extension and a request to charge the petition fee to Deposit Account No. 17-0055. No other fee is believed to be due in connection with this response. However, if any fee is due in this or any subsequent response, please charge the fee to the same Deposit Account No. 17-0055.

IN THE CLAIMS

Claims 1 and 13-55 are canceled. Claims 2, 9, and 12 are amended herein. In particular, claims 2 and 9 have been amended to clarify that they are directed at a method of vasodilating a blood vessel *in vitro* by exposing *in vitro* an isolated blood vessel to be implanted into a patient to a physiologically acceptable solution that comprises an exogenous substrate for an SSAO enzyme. Support for the amendments can be found in the specification as filed (see e.g., the first paragraph in the section entitled "Detailed Description of the Invention"). No new matter has been added.

RESTRICTION REQUIREMENT

The Examiner maintained the restriction requirement and withdrew claims 6-8 and 13-53 from consideration. Applicants respectfully submit that claims 6-8 are directed at species of generic claim 2 and should be examined and allowed if claim 2 is found to be allowable.

INFORMATION DISCLOSURE STATEMENT

The Examiner stated that the listing of references in the specification is not a proper information disclosure statement. This is acknowledged. Applicants note that an Information Disclosure Statement was filed on June 10, 2004 and the references listed there should be considered by the Examiner.

WRITTEN DESCRIPTION REJECTION UNDER 35 USC §112, FIRST PARAGRAPH

Claims 1-5 and 9-12 have been rejected under §112, first paragraph, as containing subject matter which was not described in the specification so as to convey to one skilled in the art that the inventors had possession of the invention. In particular, the Examiner has interpreted the language of claim 1, reciting a method of processing a blood vessel as meaning a method of "making" a blood vessel. While strongly disagreeing with this interpretation, applicants have canceled claim 1 and amended claims 2 and 9 to facilitate prosecution. As amended, claims 2 and 9 now recite a method of vasodilating a blood vessel *in vitro* comprising exposing *in vitro* an isolated blood vessel to be implanted in a patient to a physiologically acceptable solution that comprises an exogenous substrate for an SSAO enzyme. Applicants submit that the rejection of claims 1-5 and 9-12 as failing to meet the written description requirement has been overcome, and withdrawal of the rejection is requested.

ENABLEMENT REJECTION UNDER 35 USC §112, FIRST PARAGRAPH

Claims 1 and 12 have been rejected under §112, first paragraph, as failing to meet the enablement requirement. Specifically, the Examiner alleges that the specification, while being enabling for the use of an SSAO enzyme substrate represented by the chemical formulas recited in claims 2 and 9, does not enable the use of any exogenous substrate for an SSAO enzyme.

Without agreeing with the rejection, applicants have canceled claim 1 and amended claim 12 to depend on claim 2 to facilitate prosecution. Applicants reserve the right to pursue the canceled subject matter in a continuation application. As amended, all pending claims are limited to the chemical formulas recited in claims 2 and 9. Applicants submit that the rejection of claims 1 and 12 as failing to meet the enablement requirement has been overcome, and withdrawal of the rejection is requested.

§102 REJECTIONS

Rejection based on Vidrio et al.

Claims 1-3, 5 and 9 have been rejected under 35 U.S.C. §102(a) as being anticipated by Vidrio et al. (The Journal of Pharmacology and Experimental Therapeutics, 307:497-504, 2003). The Examiner asserts that Vidrio discloses that SSAO substrates such as benzylamine, phenethylamine and methylamine potentiate vasodilation activity of hydralazine. The Examiner further asserts that Vidrio discloses experimental study involving preparing blood vessels (aortic ring) pretreated with methylamine (400 mg/kg, i.p.). Applicants respectfully traverse the rejection below.

Claim 1 has been canceled and claims 2 and 9 have been amended to clarify that they are directed at a method of vasodilating a blood vessel *in vitro* by exposing *in vitro* an isolated blood vessel to be implanted into a patient to a physiologically acceptable solution that comprises an exogenous substrate for an SSAO enzyme. What Vidrio disclosed was that when certain SSAO enzyme substrates are administered into animals *in vivo* via the i.p. route, they potentiate the vasodilation activity of the cardiovascular drug hydralazine. It is clear from the "Materials and Methods" section of Vidrio that SSAO enzyme substrates were administered into the rats *in vivo* by i.p. injection (page 498, right column, lines 6-9 and 57-59). The isolated thoracic aorta described in Vidrio was never treated with any SSAO enzyme substrate (see page 498, right column, subsection entitled "Experiments in Rat Aorta Rings"). Just because an SSAO enzyme substrate can potentiate the vasodilation activity of the cardiovascular drug hydralazine *in vivo* does not mean that the substrate can dilate blood vessels, much less that it can do it *in vitro*. Given that Vidrio did not disclose treating isolated blood vessels with an SSAO enzyme substrate *in vitro*, the pending claims as amended are not anticipated by Vidrio.

Rejection based on EP 1459763

Claims 1-5 and 9-11 are rejected under 35 U.S.C. §102(a) as being anticipated by Nipro Corporation (EP 1459763 A1). Applicants respectfully submit that EP 1459763 is not prior art under 35 U.S.C. §102(a) because it was published (September 22, 2004) after the filing date of the present application (February 18, 2004). However, even assuming for the sake of argument that EP 1459763 is prior art under 35 U.S.C. §102(a), it does not anticipate the pending claims as amended.

As discussed above, claim 1 has been canceled and claims 2 and 9 have been amended to clarify that they are directed at a method of vasodilating a blood vessel *in vitro* by exposing *in vitro* an isolated blood vessel to be implanted into a patient to a physiologically acceptable solution that comprises an exogenous substrate for an SSAO enzyme. Nothing in EP 1459763 discloses the use of an SSAO enzyme substrate on an isolated blood vessel *in vitro*. What EP 1459763 disclosed was administering such a substrate to an animal *in vivo*. Therefore, the pending claims as amended are not anticipated by EP 1459763.

§103 REJECTIONS

Claims 1-5 and 9-12 have been rejected as being obvious over Goldstein et al. (US 7129035) in view of Seamonds et al. (The Journal of Biological Chemistry, 246:5391-5397, 1971). The Examiner cites Goldstein as teaching a method of sterilizing or preserving organ or living tissues for later implantation by exposing the tissue to an aqueous solution comprising a biocompatible buffer such as tris(hydroxymethyl) aminomethane (TRIS), which reads on the chemical formula recited in claim 9. The Examiner goes on to allege that even though Goldstein fails to teach the use of methylamine and the specific osmolarity recited in the present claims, Seamonds teaches that methylamine can be used as a buffer. The Examiner therefore concludes that it would have been obvious to replace the TRIS buffer of Goldstein with methylamine as taught in Seamonds with the expectation that methylamine would not significantly alter the analogous properties of TRIS due to close structural similarity. Applicants traverse the rejection below.

Claim 9 has been amended to delete the reference that X_1 in the chemical formula recited therein can be an alkyl having between one and twelve carbons. As amended, TRIS no longer reads on the SSAO enzyme substrates encompassed by the chemical formula recited in claim 9. As claim 9 is directed at the use of SSAO enzyme substrates and neither Goldstein nor Seamonds mentions or is concerned with the use of SSAO enzyme substrates, much less specific SSAO enzyme substrates having the formula in amended claim 9. Therefore, claim 9 and its dependent claims as amended are not obvious over Goldstein in view of Seamonds.

With respect to the Examiner's position that it would have been obvious to replace the TRIS buffer of Goldstein with methylamine as taught in Seamonds, applicants respectfully note that these two references in fact teach away from such a replacement.

Goldstein teaches that the bio-compatible buffer should maintain the pH range of 6-8 while Seamonds teaches that methylamine is a buffer for maintaining pH of above 8.5 (such as 10). See, for example, Goldstein at col. 6, lines 9-14 and Seamonds at pg. 5392, left column, lines 11-12 and right column, lines 1-7 of the second paragraph under "RESULTS." Therefore, one of skill in the art would not have replaced the TRIS buffer of Goldstein with the methylamine of Seamonds because this would defeat the purpose of Goldstein for maintaining the pH range of 6-8. Therefore, claim 2 and its dependent claims as amended are not obvious over Goldstein in view of Seamonds.

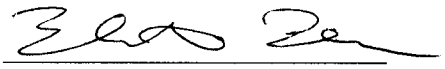
In view of the claim amendments and arguments noted above, withdrawal of this rejection is respectfully requested.

SUMMARY

Having addressed each issue raised by the Examiner by claim amendments and remarks noted above, the pending claims as amended are believed to be in condition for allowance and a Notice of Allowance is respectfully requested. Should any issues remain outstanding, the Examiner is invited to contact the undersigned at the telephone number appearing below if such

would advance the prosecution of this application.

Respectfully submitted,



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